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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,676	02/18/2005	Kiminori Mizuuchi	10873.1635USWO	9549

53148 7590 06/23/2006

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EXAMINER
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HINDI, NABIL Z

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/525,676

Applicant(s)

MIZUUCHI ET AL.

Examiner

NABIL Z. HINDI

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, and 10-19, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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In response to applicant's amendment dated June 16, 2006. The following action is taken:

The claims are rejected for the same reason set forth in the previous office action repeated herein.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 10-19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 4-61637.

The reference shows an optical disk reading and recording apparatus comprising: a multi wavelength light source generating means 1 for generating a first and second light beams, a wavelength filter separation means any of elements 3-6 for separating the two light beams into two different paths as shown by the solid and dashed lines and a condensing means for focusing the two light beams on the same spot on the medium for recording data 7. The recording medium is a multi layer disk fig 3 and the first wavelength is half of the second light beam wavelength (the reference cited a 830nm and 415 nm wavelength light beams). With respect to the limitation of claim 21, the claim is merely drawn to a "sum frequency given by a formula. The limitation does not recite any value thus reading on any number from zero to infinity. Therefore since the reference is drawn to the use of a 830nm and 415nm wavelengths such values

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implemented in the claimed formula would fall within the limitation. The recording medium having a transparent layer 31b with respect to the two light beams.

With respect to the limitation of claim 2. The reference shows two different paths 4a and 4b and focused on the same spot on the medium as shown by fig 2.

With respect to the limitation of claim 3. the reference is drawn to a magneto optical disk recording apparatus 8 and 9 which is predicated on the polarization type recording apparatus.

With respect to the limitation of claim 4. The reference shows the use of a multi-wavelength light source 1 that emits a fundamental wave and an optical conversion element that converts the light beam into a high wavelengths (second light beam) as shown by control element 10.

With respect to the limitation of claim 5 see element 1.

With respect to the limitations of claim 6. The limitation is drawn to a well established multi wavelength laser source. The reference shows the use of a multi wavelength laser source 1 being controlled by element 10 to record data on a multi layer disk (fig 3).

With respect to the limitation of claim 7. the reference shows a filter 4 separating the light beams 4a and 4b based on the transmittance and the element 4 is not uniform as shown by the surface of element 4.

With respect to the limitation of claim 10. The claim read on focusing the two different wavelength beams on the medium as shown by fig 1.

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With respect to the limitations of claims 11-13 and 15-17, 19, 20, 22 and 23. The use of a single layer (CD-R) or a multi layer disk (DVD-RAM, CD-RAM...etc) is merely a medium equivalence -see fig 3.

With respect to the limitation of claim 14. The reference shows a two light beams focused on the same spot fig 2 and the sum frequency (being infinity) meets the limitation as cited by the equation using the values (830nm and 415 nm).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 4-61637 in view of Takahashi (6480455).

The primary reference discloses the invention as analyzed above. However the reference does not disclose a ring type filter. The secondary reference discloses the use of a ring type filter for the purpose of high optical efficiency as shown by element 9. It would have been obvious to one skilled in the art at the time the invention was made to use the teachings of the secondary reference and modify the system of the primary reference. Such modification of using a ring type filter is well established in the art in order to control the light beam aperture for the purpose of enhancing the optical reading and recording efficiency. Thus one skilled in the art would have been motivated to use the teachings of the secondary reference for the purpose of enhancing the optical reading and recording operation.

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the cited prior art shows or teaches an optical disk recording apparatus wherein a ring type filter is used. The ring shaped band only passes the fundamental wave and the non-ring portion passes only the higher harmonic wave.

Applicant's arguments filed June 16, 2006 have been fully considered but they are not persuasive. In response to applicant's arguments drawn to the newly added limitations in the claims. The claims are drawn to a non0positive limitation wherein what is "approximately" to one skilled in the art is different to another. The reference in fig 2 shows "approximately the same light spot diameters" with respect to the first and second wavelengths meeting the claimed invention. The reference further shows the use of a multilayer structure disk in fig 3 meeting the claimed invention.

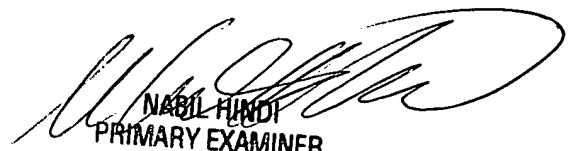
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to NABIL Z. HINDI at telephone number (571) 272-7618.

  
NABIL HINDI  
PRIMARY EXAMINER  
GROUP 2627  
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